

Claims

1.-18. (cancelled)

19. (new) A method for routing data packets having a destination address in a packet-switching data network, wherein a first and a second transmission path is assigned to the destination address, the first and second transmission paths included in a routing table of a network node of the data network, wherein the first and second transmission paths have traffic distribution weightings indicating a traffic load allocated to each transmission path, the method comprising:

assigning a maximum traffic distribution weighting to the first transmission path; and

assigning a minimum traffic distribution weighting to the second transmission path, wherein data packets are routed via the first transmission path during undisturbed operation and the data packets are routed via the second transmission path if the first transmission path is interrupted.

20. (new) The method according to claim 19, wherein, in the event of failure of the first transmission path, the second transmission path is given the maximum traffic distribution weighting.

21. (new) The method according to claim 19, wherein, in the event of failure of the first transmission path, a third transmission path is calculated, which is given the minimum traffic distribution weighting.

22. (new) The method according to claim 19, wherein a network node is controlled such that the transmission path on which a network node receives a data packet is blocked for the return

transmission of the same data packet.

23. (new) A method for routing data packets having a destination address in a packet-switching data network, wherein a first, a second, and a third transmission path is assigned to the destination address, the first, second, and third transmission paths included in a routing table of a network node of the data network, wherein the first, second, and third transmission paths have traffic distribution weightings indicating a traffic load allocated to each transmission path, the method comprising:

assigning a maximum traffic distribution weighting to the first transmission path; and

assigning a minimum traffic distribution weighting to the second and to the third transmission path, wherein data packets are routed via the first transmission path during undisturbed operation and the data packets are routed via the second or third transmission path if the first transmission path is interrupted.

24. (new) The method according to claim 23, wherein, in the event of failure of the first transmission path, at least one other transmission path is given a traffic distribution weighting that deviates from the minimum traffic distribution weighting.

25. (new) The method according to claim 23, wherein, in the event of failure of the first transmission path, at least one additional transmission path is calculated that is given the minimum traffic distribution weighting.

26. (new) The method according to claim 23, wherein a network node is controlled such that the transmission path on which a

network node receives a data packet is blocked for the return transmission of the same data packet.

27. (new) A method for routing data packets having a destination address in a packet-switching data network, wherein a first, a second, and a third transmission path is assigned to the destination address, the first, second, and third transmission paths included in a routing table of a network node of the data network, wherein the first, second, and third transmission paths have traffic distribution weightings indicating a traffic load allocated to each transmission path, the method comprising assigning a minimum traffic distribution weighting to the third transmission path, wherein the third transmission path is used for the transmission of data packets only in the event of failure of at least a part of both the first and second transmission paths.

28. (new) The method according to claim 27, wherein, in the event of failure of at least a part of the transmission paths with values that deviate from the minimum traffic distribution weighting, the at least one transmission path with a minimum traffic distribution weighting is given a traffic distribution weighting that deviates from said minimum weighting.

29. (new) The method according to claim 27, wherein, in the event of failure of at least a part of the transmission paths with values that deviate from the minimum traffic distribution weighting, at least one further transmission path is calculated that is given the minimum traffic distribution weighting.

30. (new) The method according to claim 27, wherein a network node is controlled such that the transmission path on which a network node receives a data packet is blocked for the return

transmission of the same data packet.

31. (new) The method according to claim 27, wherein a multipath routing method is applied in the packet-switching data network.

32. (new) The method according to claim 27, wherein a network operated in conformance with the Internet Protocol is used as the packet-switching data network.

33. (new) The method according to claim 27, wherein at least the failure of the first transmission path of a network node is communicated to at least one further network node.

34. (new) The method according to claim 33, wherein the transmission is effected by means of a protocol.

35. (new) The method according to claim 33, wherein a recalculation of at least one transmission path of at least one destination address is carried out in at least one further network node.

36. (new) The method according to claim 27, wherein at least one further traffic distribution weighting is assigned to the transmission paths with a minimum traffic distribution weighting entered in the routing table, said further traffic distribution weighting being used if a transmission path is interrupted.

37. (new) The method according to claim 36, wherein a transmission path is assigned respectively to the further traffic distribution weightings entered in the routing table and this traffic distribution weighting is used in the event of failure of the assigned transmission path.

38. (new) A network node for a packet-switching data network, comprising:

a routing table for entering destination addresses to which transmission paths and traffic distribution weightings are assigned, wherein at least two paths are provided per destination address, and wherein

the routing table is structured in a manner such that the minimum traffic distribution weighting is assigned to at least one transmission path for a destination address and at least one other transmission path has a traffic distribution weighting that deviates from the minimum traffic distribution weighting and in that the router can be controlled such that in the event of interruption of at least one part of the paths with a traffic distribution weighting that deviates from the minimum traffic distribution weighting, the transmission of at least one part of the packets is effected via the path with the minimum traffic distribution weighting.